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RIYADH (AFFILIATE)

May 10, 2002

## **VIA ELECTRONIC FILING**

Ms. Marlene Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

**Re: Notice of Ex Parte Presentation**  
**IB Docket No. 01-185**

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Dear Ms. Dortch:

On May 9, 2002, Neil Dabney, John Stone, and Ken Peterson, representatives of the Official Creditors Committee of Globalstar, L.P. (“Creditors”), along with Tom W. Davidson and Phil Marchesiello, counsel for the Creditors, met with Sam Feder, Legal Advisor on Spectrum and International Issues to Commissioner Kevin Martin. The Creditors presented the information contained in the attached presentation.

Pursuant to sections 1.1206(b)(1) and 1.1206(b)(2) of the Commission’s rules, this letter is being filed with the Office of the Secretary.

Sincerely,

/s/ Tom W. Davidson, Esq.

Tom W. Davidson, Esq.  
Phil Marchesiello, Esq.

Attachment

Presentation of the

**Official Creditors Committee of Globalstar, L. P.**

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**In Support of the Proposal of the  
Federal Communications Commission to  
Grant “Ancillary Terrestrial Component”  
Authority to Mobile-Satellite Service Licensees**

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**IB Docket No. 01-185**  
**May 8, 2002**

## INTRODUCTION

- The Official Creditors Committee of Globalstar, L.P. (“Creditors”) requests the Commission to expeditiously grant full, flexible and integrated ATC authority to Globalstar with respect to both its Big LEO satellite constellation and 2 GHz license.
- In its IB Docket No. 01-185 proceeding, the Commission must make three primary decisions:
  1. Should the Commission grant terrestrial rights to use MSS spectrum assignments?
  2. If so, should the Commission do so through a grant of ATC authority to MSS licensees or by segmenting MSS spectrum bands and auctioning terrestrial rights to the highest bidder?
  3. What safeguards, or “gating requirements,” should be implemented, if any, to ensure that terrestrial operations remain “ancillary” to satellite operations?

## OVERVIEW

- The public interest overwhelmingly supports the grant of full, flexible, and integrated ATC authority to Globalstar.
- ATC authority will enable Globalstar to overcome the indoor and urban reception problems that have limited consumer acceptance of its services.
- As a result, ATC authority will enable Globalstar to attract much needed new capital to realize the full potential of its service. Without ATC authority, neither Globalstar nor any other MSS licensee will be able to raise adequate funding, given existing bear market conditions.
- The Commission's decision whether to grant ATC authority represents a choice between reinvigorating the MSS industry or abandoning it.

## GLOBALSTAR, L.P.

- Globalstar operates a 48-satellite Big LEO constellation in the L/S Bands, and also holds a 2 GHz MSS license.
- Globalstar spent \$4.5 billion of debt and equity capital to develop and launch its Big LEO system. The Creditors contributed over \$3 billion of this sum.
- Globalstar serves approximately 70,000 subscribers worldwide. Globalstar has limited cash resources, annual revenues of less than \$10 million, and annual system maintenance costs exceeding \$50 million.
- Globalstar is now in Chapter 11 bankruptcy reorganization. Pursuant to a memorandum of understanding between Loral, Globalstar, and certain creditors, it is proposed that all of the Creditors' claims will be converted into equity and the Creditors will control New Globalstar when it exits bankruptcy.
- Globalstar provides a host of services including ubiquitous voice and mobile data services, position location services, various public safety services, environmental monitoring, paging, cargo and asset tracking, and industrial monitoring and control. In addition, Qualcomm and Globalstar are developing new applications, including priority and preemptive capabilities, high-speed data services, and aeronautical monitoring. These services, however, will not be commercially deployed without ATC and additional funding.
- Globalstar utilizes bent pipe technology and CDMA. The system's "intelligence" is located in its gateway earth stations, rather than its satellites, which facilitates technology upgrades
- Globalstar can and should be a critical component of future national emergency response and homeland security communications initiatives.

## ATC AUTHORITY WILL JUMPSTART THE MSS INDUSTRY AND ATTRACT VITAL NEW CAPITAL

- Globalstar's spectrum currently is drastically underutilized due to constraints caused by high prices, large handsets, and limited reception indoors and in urban areas.
- ATC authority will allow Globalstar to overcome these urban and indoor reception problems. Because Globalstar's satellite system already has been deployed, Globalstar is capable of immediately rolling out an ATC network.
- ATC authority also will enable Globalstar to attract sufficient capital to develop new, smaller handsets. This will increase subscribership which will allow Globalstar to reduce prices to consumers.
- Thus, ATC will resolve the primary constraints on Globalstar's existing service and greatly expand telecommunications access for millions of consumers.

## THE MSS INDUSTRY REQUIRES AN INFUX OF ADDITIONAL CAPITAL

- Grant of ATC authority will enable Globalstar to attract additional capital to fully realize the public interest potential of MSS.
- Conversely, without Commission grant of full and flexible ATC authority, new first and/or second generation MSS systems will not be financed and deployed and existing systems ultimately will degrade. To illustrate this point:
  - The market value of Globalstar's \$3 billion of existing debt is \$300 million, or 10% of its face value.
  - The replacement cost of an MSS constellation is approximately \$3 billion over 4 to 5 years.
  - With the market value of Globalstar's debt at approximately 10% of an MSS system's replacement cost, the implied present value of Globalstar suggests that the financial markets will not fund an additional MSS system.
  - Without ATC, the ratio of implied present value versus all-in costs is highly unattractive
- Conclusion: The revenue generating capabilities of MSS systems, absent ATC, are grossly insufficient to justify any further capital expenditures in the MSS sector.

# ATC AUTHORITY IMPROVES SERVICE

## QUALITY AND LOWERS COSTS

- Globalstar's potential remains largely unrealized and, as a result, its spectrum assignment currently is underutilized, due to constraints on subscribership caused by high prices, large handsets, and limited reception indoors and in urban areas.
- Globalstar handsets cost the consumer \$750 and service typically is priced at \$1.39 per minute, or more.
- Together, Globalstar, Iridium, and Motient have less than 150,000 subscribers.
- Globalstar currently operates at less than 1% of satellite capacity and therefore is grossly underutilized.
- ATC will resolve all of these issues and thereby ensure the financial viability of the MSS industry—the only ubiquitous mobile communications platform, and a technology particularly suited to serve rural populations, industries located in remote areas, and government users.

# ATC AUTHORITY WILL GREATLY INCREASE

## GLOBALSTAR'S SUBSCRIBER BASE

- ATC authority will generate a self-reinforcing spiral of increased subscribership followed by lower equipment and manufacturing costs and, in turn, further increased subscribership.
- ATC authority will increase consumer demand for MSS phones by:
  - Enabling the use of satellite phones in urban areas and indoors;
  - Reducing per-minute prices and handset costs through increased volume;
  - Attracting scarce capital to develop new, much smaller handsets with additional functionality; and
  - Bundling satellite and terrestrial services (i.e., one phone number, one bill, one service provider).
- Smaller, lighter handsets that work indoors and in cities, and cheaper service, offer greater utility to consumers and will expand the addressable consumer base to include millions of urban and suburban Americans who traverse regions with inadequate terrestrial mobile coverage.

## **PUBLIC INTEREST BENEFITS OF MSS**

- **Ubiquitous mobile service.** MSS is uniquely capable of providing ubiquitous mobile voice and data services everywhere in the United States and all other populated areas of the world (except indoors and in urban areas).
- **Rural service.** MSS provides mobile communications to areas and populations in the United States that are unserved or underserved by cellular and PCS providers, such as Native Americans and Alaskans. Cellular networks require a certain minimum population density for the construction of new facilities to be cost effective, and thus many remote communities will never be served by an exclusively terrestrial mobile provider.
- **Industry.** MSS supports the telecommunications needs of industries that require ubiquitous mobile communications because they operate in remote locations, such as the aeronautical, construction, maritime, transportation, news gathering, oil exploration, and utility industries.
- **Public safety and homeland security.** Local, state and federal government public safety and law enforcement personnel require the ubiquitous and robust communications offered by MSS providers. In addition, MSS phones enable subscribers to extend the eyes and ears of public safety personnel by establishing a method of contacting such personnel from remote locations.
- **Developing countries.** MSS providers offer many non-urban areas of developing countries their only access to mobile telecommunications, and supply the only access to any telecommunications services for the most remote areas.

## HOMELAND SECURITY

- The FCC recently established a Homeland Security Policy Council. Among its missions is to ensure that public safety personnel have access to effective communications in the immediate aftermath of a terrorist attack. MSS networks require very few terrestrial facilities, are highly resistant to localized terrorist threats, and are likely to remain operable following such incidents.
- Use of satellite phones by public safety, law enforcement, and defense agencies has expanded rapidly since the September 11th terrorist attacks. The unique capabilities of MSS phones were clearly demonstrated during the rescue efforts following the attacks, when terrestrial wireless and wireline systems were either destroyed or congested.
- According to Chairman Powell, “It is paramount that the Commission keep the increasing needs of the public safety community at the forefront of any new thinking in spectrum allocation policy.” (Press Conference, 10-23-01)

## HOMELAND SECURITY

- In their December 2001 “National Action Plan for Safety and Security in America’s Cities,” the U. S. Conference of Mayors recommended that “a satellite communication system be available when other communications systems are non-functional.”
- Governor Tom Ridge, Director of Homeland Security, has emphasized in numerous press conferences the need for state-of-the-art technology to protect Americans against attack. In fact, the Office of Homeland Security recently placed a bulk purchase order for Globalstar satellite phones.
- According to Giuliani Partners: The public safety community is facing two critical challenges—the need to resolve interference to their communications systems and to allow for instant, rapid, secure communications capabilities between public safety authorities across multiple jurisdictions.
- With ATC authority to enable indoor and urban communications, MSS phones are an ideal communications solution for homeland security needs because they offer ubiquitous service, are mobile, and do not rely on any local facilities, and ensure redundancy at the most critical times.

## PUBLIC SAFETY

- MSS phones are used extensively by national and international federal, state, and local governments and agencies, including agencies responsible for emergency response and management, law enforcement, public safety, defense, and customs and border patrols. The availability of satellite phones to these government personnel is of crucial importance to the public irrespective of the financial condition of the MSS market.

Office of Homeland Security	NASA
U. S. Department of Defense	Defense Information Systems Agency
American Red Cross	National Science Foundation
FDNY (Fire Department of New York)	U. S. Air Force
NYPD (New York Police Department)	Netherlands Coast Guard
Navy SEAL Insertion Team	Italian Navy
Federal Emergency Management Agency (FEMA)	Canadian Rangers
U. S. Special Forces	Kativ Regional Gov't (rural Canada)
FAA (through private company, ARNAV)	Nunavik Regional Gov't (rural Canada)
State of New York	Brazilian Air Force, Police & Fire Departments
State of Nevada	Kalbarri Volunteer State Emergency (Australia)
Orange County, California	Altadena Mountain Rescue Team
U. S. Federal Protective Service	Telecoms Sans Frontieres (int'l NGO)
U. S. Secret Service	San Dimas Mountain Rescue Team
Federal Bureau of Investigation	UNICEF
Washington, D. C.'s Emergency Mgmt Agency	United Nations High Comm. For Refugees
Oxfam	International Red Cross
United Nations Relief and Work Agency	National Communications Systems

## **PROPOSED METHODS OF AUTHORIZING**

## **TERRESTRIAL USE OF MSS SPECTRUM**

- The Commission has proposed three methods of authorizing terrestrial use of MSS spectrum:
  - Co-frequency band sharing between terrestrial and satellite platforms, which all parties that have filed comments in the proceeding now agree is technically infeasible due to interference between terrestrial and satellite operations;
  - Band segmentation with issuance of terrestrial rights via open competitive bidding; and
  - Grant of ATC authority solely to existing MSS licensees.
- This final proposal best supports the public interest and should be adopted by the Commission.

# **ONLY MSS LICENSEES SHOULD BE GRANTED AUTHORITY TO USE MSS SPECTRUM TERRESTRIALLY**

- Through temporal and geographic dynamic spectrum allocation, Globalstar will accomplish fifty percent more efficient use of MSS spectrum operating its own integrated ATC platform than an independent terrestrial licensee could accomplish operating a separately controlled terrestrial network that uses MSS spectrum.
- Granting ATC authority solely to MSS licensees is fully consistent with the Commission's long-standing policy to grant licensees flexible use of their assigned spectrum. This policy is supported by Section 303(y) of the Communications Act. The flexible-use policy has been applied by the Commission in numerous instances over the past decade, including by authorizing:
  - instructional television fixed service ("ITFS") and multichannel multipoint distribution service ("MMDS") licensees to provide both two-way and mobile services;
  - cellular and PCS licensees to offer fixed services and ancillary services, such as data services;
  - digital audio radio service ("DARS") licensees to operate terrestrial repeater networks;
  - broadcast licensees to offer non-broadcast supplemental and ancillary digital services using excess broadcast spectrum; and
  - wireless communications service ("WCS") licensees to offer any service of their choosing using their spectrum assignments.

## TERRESTRIAL AUTHORITY SHOULD NOT BE AUCTIONED TO NON-MSS LICENSEES

- The Commission proposed to authorize terrestrial use of MSS spectrum to benefit MSS licensees. Severing terrestrial and satellite authority would harm, rather than benefit, MSS licensees.
  - MSS licensees would remain unable to overcome the urban and indoor reception problems that plague MSS systems.
  - Grant of terrestrial authority would not improve the availability of new capital to the MSS industry. Rather, it would further undermine the ability of the MSS industry to attract already scarce capital, and therefore threaten the viability of the entire MSS industry.
  - Severing operations would offer no improvement over the current, commercially discredited dual-mode MSS/cellular regime. Globalstar has been the "crash test dummy" for this dual-mode regime in which subscribers "roam" onto unaffiliated terrestrial networks in urban areas. Independent terrestrial licensees have no incentive to cooperate with MSS licensees. This model suffers from poor consumer acceptance and the Creditors believe it to be a substantial cause of Globalstar's historically low subscriberhip.
  - MSS licensees would be unable to lower equipment and per minute charges to increase subscriberhip.
  - Terrestrial authority cannot be "ancillary" to satellite communications if it negatively impacts MSS licensees.
- Severing a terrestrial band from an MSS spectrum assignment would amount to an unwarranted revocation and reallocation of the MSS licensee's spectrum assignment without compensation of any sort.

**GLOBALSTAR'S ATC PLATFORM WILL NOT CAUSE**

**INTERFERENCE TO OTHER LICENSEES**

**(Source: Globalstar filing in IB Docket No. 01-185, March 22, 2002)**

- Existing technical rules applicable to Big LEO licensees will fully protect other in-band and adjacent-band licensees.
  - Interference to GPS and GLONASS will be avoided through compliance with the FCC's proposed Part 25/GMPCS rules.
  - ATC Radio Astronomy interference would be prevented through compliance with existing coordination agreement, which relies on exclusion zones and power limits.
  - Interference to Iridium will be limited according to ITU recommendations.
  - ATC base stations operating above 2498.0 MHz will be coordinated with nearby ITFS and MMDS stations.
  - ATC base station placement will be done in coordination with existing Fixed Service installations.
- ATC terminals will have the same technical characteristics as Globalstar's MSS terminals
- ATC platforms can be operated by MSS licensees without causing in-band interference between satellite and ATC platforms.

## “GATING REQUIREMENTS” TO ENSURE “ANCILLARY” STATUS OF ATC PLATFORMS

- How should the term “ancillary” be defined? According to the CTIA, in its initial comments in the ATC proceeding:
  - “ancillary services do not differ materially in nature or character from the principal services offered”
  - “ancillary...points to something that, in terms of its function or purpose, is part of or is related to, something else”
  - “ancillary...is something that is subordinate, subsidiary, auxiliary, related, or supplementary”
- Adoption of artificial gating requirements is not necessary to ensure that the public continues to receive the full complement of public interest benefits inherent to MSS satellite systems and that no party suffers adverse consequences from the operation of ATC networks.
- Market forces are more likely than regulatory intervention to influence MSS providers to use their ATC authority most efficiently and cost-effectively, and in a manner that best promotes the public interest.

## **“GATING REQUIREMENTS” TO IMPLEMENT ATC AND ENSURE “ANCILLARY” STATUS OF ATC PLATFORMS**

- By adopting two ATC policy principles, the FCC can implement ATC without interfering with other users and ensure that terrestrial services remain “ancillary” to MSS satellite services:
  1. The FCC should only permit MSS licensees to operate ATC networks if the licensees are in full compliance with applicable MSS coverage requirements.
  2. The FCC should prohibit MSS licensees from causing harmful in-band or adjacent-band interference to other licensees as a result of their ATC operations
- Although no additional gating requirements are necessary to achieve “ancillary” status, as explained in the following table, several gating requirements could be imposed without serious detrimental effects on the efficacy of ATC authority. By contrast, other gating requirements entirely would eliminate the value of ATC authority to MSS providers and to subscribers.

## DISCUSSION OF PROPOSED GATING REQUIREMENTS

<b>Proposed Requirement</b>	<b>Impact</b>
Require all calls to be routed through a single “central” switch.	<p>Increase terrestrial backhaul requirements which increase costs to MSS licensees. Increases complexity and fallibility of terrestrial networks.</p> <p><b>Net result:</b> <b>Higher consumer prices and increases ATC service outages.</b></p>
Limit deployment of ATC to urban areas.	<p>Relegates rural users to second class status by depriving them of indoor service in municipal areas large enough to make ATC deployment cost effective. Precludes spectrum reuse in rural areas.</p> <p><b>Net result:</b> <b>Harms rural users—the group whom the FCC is trying to protect through rules to ensure ancillary nature of ATC.</b></p>
Impose flat rate (i.e. identical) pricing for MSS and ATC services. <b>(Acceptable)</b>	<p>Economically inefficient because an MSS call consumes spectrum resources over a far larger geographic area than an ATC call. Consequently, the operator should be able to assign a higher cost to MSS minutes</p> <p><b>Net result:</b> <b>Inefficient pricing and subsidization of rural users.</b></p>
Require all ATC-capable handsets also be MSS-Capable <b>(Acceptable)</b>	<p>Decrease price of handsets through larger production runs, but increase size of handsets. Reduces demand for service (customers want smaller, less expensive handsets).</p> <p><b>Net result:</b> <b>Lower handset prices but potentially could reduce customer demand due to larger handsets.</b></p>

# DISCUSSION OF PROPOSED GATING REQUIREMENTS

<b>Proposed Requirement</b>	<b>Impact</b>
Require ATC to route all calls through satellite.	<p>Would require each call to be duplicated: (i) handset to ATC tower link; and (ii) the ATC tower to satellite link.</p> <p>Would cause ATC calls to consume more resources than satellite calls.</p> <p>Would limit the capacity of the entire MSS/ATC network to the capacity of the satellites themselves, which would be reduced due to the duplication identified above.</p> <p><b>Net Result:</b> <b>Extremely spectrally inefficient. ATC will not be utilized.</b></p>
Require calls to default to the satellite component if it is available.	<p>Because the satellite spot beams are many times larger than even the largest terrestrial cells, this would prevent MSS licensees from realizing significant benefit from terrestrial reuse of spectrum.</p> <p>Urban users whose calls could be routed over ATC instead will constrain satellite capacity, which capacity then may be unavailable to a rural user.</p> <p><b>Net result:</b> <b>Extremely spectrally inefficient. ATC will not be utilized.</b></p>
Require some fraction of calls (e.g. 51%) to be routed over satellites.	<p>Reduces benefits of ATC to consumer (i.e., indoor and urban coverage) and promotes inefficiency by artificially constraining consumer behavior.</p> <p>Reduces benefits of spectrum reuse to MSS licensee</p> <p>Places an artificial cap on benefits that can be derived from ATC and thereby provides a disincentive to development of ATC networks.</p> <p><b>Net result:</b> <b>Decreases benefits derived from ATC. Could prevent ATC buildout.</b></p>
Require satellite routed calls to have “priority” over ATC routed calls. <b>(Acceptable)</b>	<p>Technically challenging, expensive, and time consuming to develop. Thus, if imposed immediately, it will delay the introduction of ATC for a significant period of time and increase the cost of MSS.</p> <p><b>Net result:</b> <b>Expensive and likely to cause delays in the launch of ATC if initially required.</b></p> <p><b>Urban calls will be subordinate to rural calls.</b></p>

## SUMMARY

- A Commission grant of full and flexible ATC authority to MSS licensees is consistent with Commission policy and precedent. It removes regulatory restraint. ATC should be viewed as a form of deregulation, rather than as a grant of special authority.
- ATC authority is overwhelmingly in the public interest and significantly improves spectrum utilization.
- ATC authority will enable Globalstar to overcome the primary shortcomings of the MSS industry: high prices, large handsets, and limited reception indoors and in urban areas.
- The Commission's decision on ATC represents a choice between invigorating the MSS industry by stimulating addition capital investment in the industry, or abandoning the industry.
- ATC will improve mobile communications for rural and urban Americans, as well as law enforcement, public safety, and emergency management personnel
- Terrestrial authority should not be separated from MSS licenses. Doing so harms, rather than benefits, MSS licensees by undermining all of the advantages of ATC authority to MSS licensees, while effectively revoking a portion of their spectrum assignments.
- The Commission only should adopt the limited “gating requirements” which are necessary, rather than the myriad of unnecessary proposals offered by opponents of ATC authority to undermine its efficacy.